ABSTRACT

[0073] Disclosed herein is an electronic device capable of providing efficient fault-tolerance update processes by employing a backup memory block used in conjunction with a block-by-block update process, wherein the backup memory block may be employed to store backup content computed using updated contents of a first memory block and contents of unmodified second memory block. The first and second memory blocks may be recoverable following a fault by computations using the content of the backup memory block. Fault-tolerant recovery processes according to an embodiment of the present invention apply the contents of the backup memory block to efficiently recover from faults occurring during update of one of firmware and software in an electronic device.